

**Amendments to the Claims:**

Please amend the claims as follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1 – 39 (Canceled)

40. (New) A multi-band antenna system, comprising:

a reactive circuit having a loop section and a shunt capacitor, the loop section having a ground conductor, forming a shunt inductor of the reactive circuit, and a signal conductor, the shunt capacitor having a first terminal coupled to the ground conductor at the first end of the loop section and a second terminal coupled to the ground conductor at the second end of the loop section;

a dipole antenna having a first pole and a second pole; and

a transmission means coupling the first pole to the ground conductor and coupling the second pole to the signal conductor.

41. (New) The multi-band antenna system of claim 40 wherein the capacitance of the shunt capacitor and the inductance of the shunt inductor are determined so that the reactive circuit operates as a trap for received signals having frequencies within a first frequency band.

42. (New) The multi-band antenna system of claim 41 wherein the length of the first pole and the length of the transmission means are determined based upon the first frequency band so that a monopole antenna formed from the first pole and the transmission means is capable of receiving signals within the first frequency band.

43. (New) The multi-band antenna system of claim 40 wherein the loop section is formed from a portion of the transmission means.

44. (New) The multi-band antenna system of claim 43 wherein the length of the second pole is determined based upon a second frequency band so that the dipole antenna is capable of receiving signals within the second frequency band.

45. (New) The multi-band antenna system of claim 42 wherein a radiation impedance of the monopole antenna is input directly into a feed system and transmitted from the feed system to a radio signal receiver.

46. (New) The multi-band antenna system of claim 45 wherein the feed system is a diplexer.

47. (New) The multi-band antenna system of claim 46 wherein the radio signal receiver is a radio signal receiver of a wireless modem.

48. (New) The multi-band antenna system of claim 40, further comprising a diversity dipole antenna.

49. (New) The multi-band antenna system of claim 48 wherein a polarization of the diversity dipole antenna is orthogonal to a polarization of the dipole antenna.

50. (New) The multi-band antenna system of Claim 40, further comprising a matching circuit coupled between first and second poles of the dipole antenna.

51. (New) The multi-band antenna system of Claim 50 wherein said matching circuit is further configured to operate as a balun for the dipole antenna.

52. (New) The multi-band antenna system of Claim 50 wherein the matching circuit, the dipole antenna and a portion of the transmission means are formed on a first printed circuit board and the reactive circuit is formed on a second printed circuit board.